

Curriculum

Advanced Education in General Dentistry Program

The Advanced Education in General Dentistry-1 Program is a postgraduate educational program offering recent dental school graduates advanced clinical and didactic education at the post doctoral level. This 52-week program conforms to the standards set forth by the Council on Dental Education of the American Dental Association.

The objective of the program is to produce competent, well-rounded Air Force General Dental Officers (47G3C) who can effectively manage the comprehensive dental health needs of the Air Force community worldwide. Didactic and clinical training will be provided in the disciplines of endodontics, oral surgery, orthodontics, periodontics, fixed and removable prosthodontics, treatment planning, operative and pediatric dentistry. In addition to these disciplines, forensic dentistry, infection and hazard control, preventive dentistry, geriatric dentistry/special care, Advanced Cardiac Life Support, oral and maxillofacial pathology, anxiety and pain control, and dental readiness training will be provided.

Anesthesia Experience

An anesthesia rotation will stress airway management utilizing patient positioning, face mask, and endotracheal intubation. The pharmacology of anesthetic agents, narcotics, and emergency drugs will be learned. Residents should become competent in vital sign monitoring, venipuncture, fluid management, and correlating medical history with anesthetic risk.

Craniofacial/Temporomandibular Disorders

The residents will attend a Craniofacial Pain Seminar covering a wide range of non-surgical management therapies. The residents will demonstrate the ability to systematically evaluate a patient with symptoms suggestive of craniofacial pain disorders, particularly those involving the muscles of mastication and the TMJ. Residents will then formulate a differential diagnosis, and establish a treatment plan based on the diagnosis. Conservative treatment options will include physical therapy, pharmacotherapeutics, orthosis fabrication and usage, anxiety recognition, behavior modification and referral to appropriate medical/dental specialties.

Dental Administration

Numerous topics of interest are covered in these seminars that address both the civilian and military practice. Private practice administration seminars and practice planning will be coordinated with local area dentists. Local civilian dentists will also make presentations and provide opportunities for the residents to visit their offices. Military practice training includes management of enlisted personnel, the dental equipment/supply system, dental command

structure, Air Force regulations, officer assignments, career progression, and continuing education opportunities. The Chief Resident will be a rotating member of the Clinical Performance Assessment and Improvement Committee that reviews documentation of patient records. Training in the management of dental laboratory work orders and ordering dental supplies and equipment will occur throughout the year's residency. Ethics lectures and workshops will be given by hospital consultants, and medico-legal briefings are given by area consultants. Residents will be trained in infection control concepts and procedures, aseptic technique, and be familiar with hazard control and waste management.

Endodontics

Endodontic training is designed to enable the resident to achieve a high degree of proficiency in the diagnosis, treatment planning, and clinical management of cases covering a wide variety of pulpal and periapical pathology. Teaching methods include lectures, seminars, literature reviews, clinical demonstrations, and clinical experience under the supervision of the endodontic staff. The clinical focus of the program encompasses diagnosis, endodontic urgent care, routine and non-surgical endodontic treatment. Exposure to advanced treatment techniques, to include rotary instrumentation, surgical endodontic treatment, and complex case management is available. The didactic instruction compliments clinical procedures.

Forensic Dentistry

Forensic dentistry training teaches the resident a basic understanding of forensic dental identification in order to become a knowledgeable member of a dental forensic team. This hands-on course will train the residents to be competent in obtaining and documenting antemortem and postmortem dental records. The goal of this all day hands-on seminar is combining these records to make the appropriate comparisons and develop a forensic dentistry summary report. Residents will be given actual scenarios and postmortem remains and asked to conduct an investigation.

Medical Risk Assessment / Geriatric Dentistry

The residents will gain experience in treating the geriatric and medically compromised patient. The overall goals of the AEGD-1 Program training in medical risk assessment and geriatric dentistry are to develop the ability to: (1) understand the unique needs of the geriatric patient (2) recognize significant deviations from normal health status that may affect dental management; (3) make informed judgments on the risk of dental procedures to patients, and (4) identify the need for medical consultation and referral. These objectives will be met through didactic and clinical training. The clinical experience will be provided by work-ups of assigned dental patients, on-call experience, and a rotation in anesthesia.

Oral and Maxillofacial Pathology

Oral and Maxillofacial Pathology training will be directed toward the development of the residents' acumen in clinical oral and maxillofacial pathology including history findings, examination, differential diagnosis, and biopsy. A USAF Military Consultant in Oral Pathology will cover all basic aspects of clinical oral maxillofacial pathology in a 1-week core type course. This lecture/seminar course will emphasize the clinical diagnosis and management of cases using a Clinical Pathological Conference (CPC) format. Primary emphasis will be on the range of common oral pathological entities.

Oral and Maxillofacial Surgery

The objective of the Oral and Maxillofacial Surgery rotation is for the resident to be competent in exodontia and adjunctive procedures. Each resident will be provided experience in diagnosis, exodontia, biopsy technique, intravenous sedation, treatment of traumatic injuries, and treatment of acute and chronic pathologic conditions. The Oral and Maxillofacial Surgery staff will present lectures in oral medicine and provide clinical supervision that stresses the importance of gaining a thorough understanding of pain control, laboratory tests, medical consultations, aseptic technique, and the considerations associated with treating medically compromised patients. Each resident will be exposed to operating room procedures and will assist the Oral Maxillofacial Surgeon on selected cases.

Orthodontics

Orthodontic training equips the resident with the basic skills necessary to accurately classify and diagnose malocclusions and exposes the resident to minor tooth movement techniques. The training consists of clinical and didactic phases. Formal seminars, presentations/lectures, case presentations, treatment planning conferences, progress conferences, and literature reviews are utilized in didactic training. Clinical training, supervised by the staff, exposes the residents to fixed and/or removable appliances used in minor tooth movement. Treatment planning is based on cephalometric analysis and thorough model analysis to identify the skeletal and dental factors of the malocclusion. The treatment plan is further personalized through assessment of the patient's chief complaint and consideration of both the medical and dental histories.

Pain and Anxiety Control

The resident will broaden his/her awareness of managing apprehension and pain in the practice of dentistry. This is accomplished by the resident increasing his clinical competence in diagnosing pain and anxiety. By understanding various pharmacologic and behavioral adjuncts, the resident will be able to select the appropriate method of helping the patient. Clinical exposure in various techniques of local anesthesia and intravenous conscious sedation will be accomplished.

Pediatric Dentistry

Pediatric dentistry training focuses on developing the knowledge and skills necessary to diagnose and treat dental disease in the pediatric dental patient. The program is clinically oriented with related didactic study through lectures, seminars, and literature review. Training will include concepts of growth and development, preventive dentistry, restorative dentistry, interceptive orthodontics, and emergency procedures. Particular emphasis is placed upon non-pharmacologic behavior management of the uncooperative pediatric dental patient, while instilling a positive dental attitude.

Periodontics

Clinical training in periodontics will include diagnosis and treatment of acute and chronic pathologic conditions of the periodontal structures and masticatory system. The etiology and pathology of periodontal diseases will be reviewed in detail. The resident will be trained in current modalities in surgical and non-surgical therapy. Treatment planning, patient management, preventive and supportive therapy (maintenance) will be emphasized. The didactic portion of the program will include lectures, seminars, and clinical demonstrations covering all aspects of periodontal therapy. Reading assignments from the past and present dental literature will supplement lectures/seminar to broaden the residents' knowledge. Throughout the entire year, the interrelationship between periodontics and other specialty areas of dentistry will be emphasized.

Preventive Dentistry

The resident will be aware of the educational and therapeutic modalities in preventive dentistry. Competency in diagnosis, individualizing specific patient needs, and the implementation of sound preventive dentistry therapy based on the patient's caries risk assessment will be practiced. Oral microflora physiotherapy and chemotherapy, fluoride therapy, pit and fissure sealants, and conservative/preventive restorations and materials will be a part of a "medical model" comprehensive preventive dentistry experience.

Prosthodontics

Prosthodontic training encompasses a broad spectrum of clinical prosthodontics and related laboratory technology. The training will provide didactic instruction and clinical experience within the context of the general dentistry practice. The program will include fixed and removable prosthodontics, and implant prosthodontics will be limited to the clinical situations that the resident might confront within a general dentistry Air Force practice. Broad based clinical experience and in-depth prosthodontic training will provide the resident with advanced skills, expanded knowledge and greater confidence for diagnosing, planning, and treating the frequently encountered prosthodontic needs, including esthetic restorations. The

focus will be on rational and practical solutions to clinical problems and situations. Training in laboratory technology will prepare the resident with the experience and competence to effectively utilize laboratory services. Direct clinical instruction and demonstration will be the primary training methods used. The didactic dimension will be developed through lectures, seminars and conferences utilizing appropriate visual aids.

Restorative / Operative Dentistry

This segment of the Advanced Education in General Dentistry Residency will provide training in clinical and didactic aspects of restorative/operative dentistry. Teaching efforts will expand and build upon the residents skills and knowledge including biologic and periodontal considerations in operative dentistry, isolation of the operative field, conservative and complex amalgam restorations, tooth-colored restorations, management of subgingival fractures and subgingival carious lesions, and clinical applications of a wide range of dental materials. This department will emphasize examination, diagnosis, and treatment planning skills in conjunction with other disciplines. Course material will be presented in a systematic manner and will consist of direct patient care, chairside instruction, consultation with specialists, lectures, literature reviews, seminars, and conferences.

Formal Courses

- Advanced Cardiac Life Support
- Dental Implant Seminar
- Forensic Dentistry
- Oral and Maxillofacial Pathology
- Facial Moulage (Impression for Pilot's Mask)
- Oral Medicine
- Restorative Dental Materials Update
- Craniofacial Pain